

CLAIMS

WHAT IS CLAIMED IS:

1. A method of compressing video, comprising:
grouping video frames that are between consecutive I-frames into a video data set;
splitting the video data set into a plurality of homogeneous files; and
individually compressing each of the homogeneous files.
2. A method according to claim 1, wherein the video frames include P-frames and B-frames.
3. A method according to claim 1, wherein said splitting includes storing mode information of the video data set and motion components in separate files.
4. A method according to claim 1, wherein said splitting includes storing horizontal components of the video data set and vertical components of the video data set in separate files.
5. A method according to claim 1, wherein said splitting includes storing B-frame components of the video data set and P-frame components of the video data set in separate files.
6. A method according to claim 1, wherein said splitting includes storing mode 3 B-frame components of the video data set and mode 0, 1, and 2 B-frame components of the video data set in separate files.
7. A method according to claim 1, wherein said splitting includes storing different color components of the video data set in different files.

8. A method according to claim 1, further comprising mapping negative values in one of the homogeneous files into positive values.

9. A method according to claim 1, wherein said compressing includes applying a grammar-based code.

10. A method according to claim 9, wherein said applying includes employing a YK algorithm.

11. A method according to claim 1, wherein said compressing includes bit plane encoding quantized transform coefficients obtained from the video data set.

12. A method according to claim 11, wherein said compressing includes performing a run-length encoding of bit planed encoded coefficients.

13. A method according to claim 1, wherein said homogeneous files have similar statistical properties.

14. A method according to claim 1, further comprising multiplexing the separate files into a bit stream.

15. A method according to claim 14, further comprising prefixing a corresponding header to each of the separate files, said header indicating a size of a corresponding separate file.

16. A computer-readable medium bearing instructions for compressing video, said instructions being arranged, upon execution by one or more processors, to perform the steps of the methods as in any of claims 1-15.

17. A video compression system, comprising:

means for grouping video frames that are between consecutive I-frames into a video data set;

means for splitting the video data set into a plurality of homogeneous files; and

means for individually compressing each of the homogeneous files.

18. A video compression system according to claim 17, further comprising:

means for multiplexing the individually compressed files into a bit stream.